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ACQUISITION OF WRITTEN LANGUAGE BY PRIMITIVE PEOPLES.

By ALEXANDER F. CHAMBERLAIN.

The following notes are offered as a brief contribution to the psychology of language-learning from the field of American linguistics. The literature concerning the acquisition of written language by primitive peoples is very limited in extent, and the author has endeavored to bring together here what is known of the attempts by missionaries and others to enable certain American Indian peoples to read and write their own tongues. The remarkable ease with which this has been done in some cases is an important fact, psychologically and pedagogically.

I. *Algonkian*. The first attempt to make the Algonkian Indians acquire an Indian or a European language by means of a specially prepared syllabic alphabet was that of Père LeClercq, a Recollect missionary among the natives of Gaspé for many years, beginning with 1655. Following is his own account of the origin and development of these characters, as given by Shea:

"The easy method which I found for teaching our Gaspeians their prayers with certain characters which I formed, effectually convinces me that the majority would soon become instructed; for, indeed, I should find no more difficulty in teaching them to read than to pray to God by my papers, in which each arbitrary letter signifies a particular word, and some even two together. They so readily grasp this kind of reading that they learn in a single day what they would never have been able to retain in a whole week without the aid of these cards, which they call *kignamotinoer* or *kateguenne*. They preserve these instructive papers so carefully and prize them so highly that they keep them very neatly in little bark cases adorned with wampum, beads and porcupine quills. . . . Our Lord inspired me with this method the second year of my mission, when, being greatly embarrassed as to the mode in which I should teach the Indians to pray, I noticed some children making marks on birch-bark with coal, and they pointed to them with their fingers at every word of the prayer which they pronounced. This made me think that, by giving them some form which would aid their memory by fixed char-

acters, I should advance much more rapidly than by teaching on the plan of making them repeat over what I said. I was charmed to know that I was not deceived, and that these characters which I had traced on paper produced all the effects I desired, so that, in a few days, they learned all their prayers without difficulty. . . . I enlarged them so as to include all the prayers of the Church, with the sacred mysteries of the Trinity, Incarnation, Baptism, Penance, and the Redemption."

In his *Algonquian Bibliography* Pilling gives, from LeClercq, a facsimile of the Lord's Prayer in these Micmac "hieroglyphics" (p. 304). It will be seen that some of them are quite complicated. These characters continued in use among the Micmacs, who, as late as 1881, according to Dr. J. G. Shea, could "write and read them."

In 1866, Rev. C. Kauder, a Redemptorist priest, who had gone over to the Trappists at Tracadie, N. B., where he studied the Micmacs and their hieroglyphics, published, with the title, *Buch das gut, enthaltend den Katechismus, Betrachtung, Gesang* (Wien, 1866), a catechism, hymn-book, and book of devotion in Micmac "hieroglyphs" with interlinear wording in German. In this work he is said to have been aided by Michael Christmas, an educated Indian of Nova Scotia. A facsimile of the title-page of this book is given by Pilling (p. 274). Cuoq, in his *Lexique de la langue Iroquoise* (Montréal, 1882) writes of the work of Kauder as "fort beau et très-ingénieux, mais aussi très-dispendieux et, à mon avis, fort peu pratique." But the Abbé Cuoq was no friend of "new graphic systems." Micmac MSS. exist in these "hieroglyphs," but since Kauder's book, none seem to have been printed, at least to any extent. For Kauder a special font of type was cast in Vienna. It is very interesting that, so early as the middle of the seventeenth century, an attempt should have been made to give these Indians a reading knowledge of language.

About 1840, Rev. James Evans, for many years a Methodist missionary among the Cree and other Indian tribes of the Hudson Bay region centering about Norway House, bethought himself of applying a phonetic system for translations into the Cree language, developing by 1841 what is now called the "Cree Syllabary," or "Evans's syllabary." The idea seems to have come to him from some of the shorthand systems exploited about this time in England, as may be seen from comparing his characters with those, *e. g.*, of Pitman, etc. In 1841 Evans began to teach his system to the Cree Indians, and soon set about printing books. The very earliest types were whittled from blocks of wood with a pocket knife; the ink was made from soot; the "paper" used was birch-bark. Some of the original type and birch-bark books are still preserved.

Having been for some years refused permission by the Hudson Bay Company to import press and types, he "cast leaden blocks from the lining of the chests in which tea was brought into the country, and whittled them into shape as best he could, and, by a rough improvised press of his own manufacture, succeeded in printing many hymns, sections of the Holy Scriptures, and primary school-books, which were of great service." A set of these home-made types was sent to England, and soon the Hudson Bay Company gave their consent, "to have a font cast and, with a press, sent out to Norway House, pledges being given that they would be used only for mission work." Evans himself did not live long to carry on his work, dying in November, 1846, after returning to England. His labors have been continued by others, however, and to-day, "the different sub-tribes included in the Cree confederacy are supplied with native literature to a greater extent than any of the other Indian tribes in Canada (Maclean, *Canad. Sav. Folk*, p. 283)," and "few Cree Indians can be found who are not able to read the literature printed in the syllabic characters (p. 85)." The success of this syllabary was early reported by Ballantyne, in his *Hudson Bay* (Lond., 1848), where we read concerning Evans at Rossville (cited by Maclean):

"I spent a pleasant afternoon in sauntering about the village, and in admiring the rapidity and ease with which the Indian children could read and write the Indian language by means of a syllabic alphabet invented by their clergyman. The same gentleman afterwards made a set of leaden types with no other instrument than a pen-knife, and printed a great many hymns in the Indian language (p. 159)." Rev. John Maclean, in his book on *The Indians* (Toronto, 1889), says of Evans's syllabary:

"It is so simple in construction that an Indian with average intelligence can memorize the whole in a day, and in less than one week read fluently any book written upon this plan (p. 256)." Many of the Indians have learned to read fluently "with no other teachers but the Indians around the camp-fires."

The northern Crees, among whom Evans labored, have naturally taken to it most, but later on it obtained a footing among the Plains Crees and the Stonies, who, according to Maclean, "read the books printed in this system fluently, and write letters in it, some of which I have in my possession." By Rev. E. J. Peck the Evans syllabary has been adapted to Eskimo, and by Father Morice to the Carrier language of the Athapascan stock. Protestant and Catholic missionaries use it, and the Indians of several tribes write it on birch-bark, etc. The total of the literature extant among all the tribes employing the Evans syllabary or modifications of it is quite considerable,

as revealed, *e. g.*, by the titles in Pilling's bibliographies, and it has certainly "exerted a great educating influence over the minds of the people." Maclean remarks :

"By means of this syllabary a clever Indian can memorize in an hour or two all the characters, and in two or three days read the Bible or any other book in his own language." Pilling, who calls the Cree syllabary "a great improvement on the Cherokee," says of these characters: "Those who use them in teaching say it takes the average child not two-and-a-half years (as with us) to read fluently, but a few weeks."

II. *Athapascan*. Rev. A. G. Morice, since 1885 a Catholic (O. M. I.) missionary among the Carrier Indians of Stuart's Lake, B. C., published in 1890 *The New Methodical, Easy and Complete Déné Syllabary* (2 pp.), which is reproduced by Pilling in his *Athapascan Bibliography* at pages 67-69. The syllabary is also to be found in Morice's article on *The Déné Languages* (Trans. Canad. Inst., Vol. I, 1889-1890, p. 175). In these characters Father Morice has published a Déné primer, catechism, etc. In illustration of the practical worth of his new syllabary he tells us, "Through it Indians of common intelligence have learnt to read in one week's leisurely study before they had any primer or printed matter of any kind to help them on. We even know of a young man who performed the feat in the space of two evenings."

More recently (Bull. Soc. Neuchât. de Géogr., Vol. XV, 1904, p. 74), Father Morice is on record as saying, in connection with a letter written by an Indian in these characters with a bit of charcoal on a piece of pine-bark: "Our Indians read and write their language, with marvellous facility, by means of recently invented syllabic characters, which they learn without having any regular schooling."

Morice's syllabary, perfected in 1889, is based upon Evans's Cree syllabary, with modifications necessary to express, "the more numerous and delicate" sounds of the Carrier tongue. In an earlier article (Proc. Canad. Inst., Vol. VII, 3d Ser., 1889, p. 166), Father Morice wrote :

"I am now continually in receipt of letters from Indians whom I never taught and who have learned to read after one or two weeks (in some cases I might say three or four days) private instruction from others."

Rev. W. W. Kirkby, for a number of years (1870-1879) an Episcopal missionary among the Chippewyan Indians of the Athapascan stock, about the Churchill River, published several translations (hymns and prayers, manuals of devotion, Gospels of St. John and St. Mark, New Testament, portions of the Book of Common Prayer, etc.) into the Chippewyan tongue in a syllabary based upon, or rather identical with, that of

Evans for the Cree, etc. Religious publications in this syllabary have appeared in other Athapascan languages, *e. g.*, the Slavé. The syllabary publications of Perrault (1857-1865) and Legoff (1890) in Chippewyan (Mountaineer) belong here also.

III. *Chinookan*. Father Le Jeune, a missionary priest (O. M. I.) since 1880 among the Thompson, Okanagan and Shushwap Indians of British Columbia, has adapted for use in stenographic and mimeographed publications (vocabulary, hymns, primer, etc.), in the Chinook jargon, still a *lingua franca* of this region, the Duployan system of short-hand, which made its appearance in Paris in 1867, Father Le Jeune (he was then 16) learned it in a few hours. In July, 1890, he thought of trying it "as an easy phonetic writing for the Indians of British Columbia," first on the Nicola, then in succession on the Shushwap and Thompson tribes. In May, 1891, he began to publish the Kamloops Wawa, a periodical in the Chinook jargon in stenographic characters and mimeographed copies. A facsimile of the first page of the first number is given by Pilling in his *Chinookan Bibliography*.

IV. *Eskimoan*. The Evans characters have been introduced among some of the Eskimo communities. Rev. E. J. Peck, an Episcopal missionary, the scene of whose labors has been successively Little Whale River in the Ungava district and (since 1894) Blackhead Island in Cumberland Sound, translated into the Eskimo language of those regions certain portions of the Scriptures and had them printed in the syllabic characters of Evans. He then began at once to teach the Eskimo to read. His experience was that the natives of both sexes and all ages learned to read their language with wonderful facility. Of the 40 families, whose headquarters were at Little Whale River, it is related that after a little more than two years had elapsed, "they can all, with few exceptions, read their books." Indeed, there are instances on record in "which a couple of weeks' instruction sufficed to enable a native to decipher texts." A copy of the Eskimo syllabary is given by Pilling in his *Eskimoan Bibliography* (p. 73) and by Maclean in his *Canadian Savage Folk* (Toronto, 1896, p. 504).

V. *Iroquoian*. The Cherokee branch of the Iroquoian linguistic stock has been distinguished by the invention of the so-called "Cherokee alphabet" properly a syllabary, the device of Sequoyah, or George Guess (or Gist), whose father was probably a "Pennsylvania Dutchman," his mother a Cherokee squaw. Pilling writes of him:

"An illiterate vagabond, vague and dreamy, if report be true, who could read neither his own nor any language, and was taunted, it is said, with this fact by some white men;

whereupon, so the story goes, he retorted that he would learn and teach his brethren as well." Foster, in his biography, styles him "Sequoyah, the American Cadmus and Modern Moses . . . the greatest of all Red Men, around whose wonderful life has been woven the manners, customs and beliefs of the early Cherokees, together with a recital of their wrongs and wonderful progress towards civilization." As he was born *ca.* 1760, Sequoyah, whose "dreamy meditations on this invention" are placed in 1809-1821, must have been much past middle age when it was fully achieved. There is no evidence that he attended school as a boy, for the first mission among the Cherokee was not established until long after he had reached manhood. The earliest known account of the "Cherokee alphabet" dates from 1826 (cited by Pilling from *Missionary Herald*, Feb., 1826, pp. 47-49):

"A form of alphabetic writing, invented by a Cherokee named George Guess, who does not speak English, and was never taught to read English books, is attracting great notice among the people generally. Having become acquainted with the principle of the alphabet, viz., that marks can be made the symbol of sound, this uninstructed man conceived the notion that he could express all the syllables in the Cherokee language by separate marks or characters. On collecting all the syllables which, after long study and trial, he could recall to his memory, he found the number 82. In order to express these he took the letters of our alphabet for a part of them, and various modifications of our letters, with some characters of his own invention, for the rest. With these symbols he set about writing letters; and very soon a correspondence was actually maintained between the Cherokees of Wills Valley and their countrymen beyond the Mississippi, 500 miles apart. This was done by individuals who could not speak English, and who had never learned any alphabet but this syllabic one, which Guess had invented, taught to others, and introduced into practice. The interest in this matter has been increasing for the last two years, till, at length, young Cherokees travel a great distance to be instructed in this easy method of writing and reading. In three days they are able to commence letter-writing, and return home to their native villages, prepared to teach others. . . . Either Guess himself, or some other person, has discovered four other syllables, making all the known syllables of the Cherokee language 86. This is a very curious fact, especially when it is considered that the language is very copious on some subjects, a single verb undergoing some thousands of inflections."

In 1827, Rev. S. A. Worcester compared the "Cherokee alphabet" with the alphabet of Pickering as follows:

"I am not insensible of the advantage which Mr. Pickering's alphabet, in common with that in use at the Sandwich Islands, possesses above the English, by being so much more nearly a perfect alphabet. Nor do I suppose that more than half the time would be required for a Cherokee child to learn to read his own language in that alphabet, which is required for an English child to learn his. But, in point of simplicity, Guess has still the pre-eminence; and, in no language, probably, can the art of reading be acquired with nearly the same facility."

In 1827 a font of type, specially cast for the new syllabary, and a printing press were sent from Boston, and a national paper in the Cherokee language and alphabet, the *Cherokee Phoenix*, was established in February, 1828, but lasted only six years. After the removal of the Cherokee to the Indian Territory, there was begun, in 1844, the *Cherokee Advocate*, of which Mooney informs us (pp. 109-113; 219-220):

"It is still continued under the auspices of the Nation, printed in both languages and distributed free at the expense of the Nation to those unable to read English,—an example without parallel in any other government." Besides being employed in a vast amount of religious literature (Bible translations and extracts, hymn-books, etc.), newspapers and periodicals, text-books and school-books, law-codes, etc., political and other tracts, and the like, "the syllabary is in constant and daily use among the non-English-speaking element, both in Indian Territory and in North Carolina, for letter-writing, council-records, personal memoranda, etc." Mr. Mooney calls attention also to another use of the syllabary:

"What is perhaps strangest of all in this literary evolution is the fact that the same invention has been seized by the priests and conjurers of the conservative party for the purpose of preserving to their successors the ancient rituals and secret knowledge of the tribe, whole volumes of such occult literature in manuscript having been obtained among them by the author." Some of this literature has been published by Mr. Mooney, the rest lies in the library of the Bureau of American Ethnology at Washington. The effect of the "Cherokee alphabet" is described by Mr. Mooney.

"The invention of the alphabet had an immediate and wonderful effect on Cherokee development. On account of the remarkable adaptation of the syllabary to the language, it was only necessary to learn the characters to be able to read at once. No schoolhouses were built and no teachers hired, but the whole Nation became an academy for the study of the system, until, in the course of a few months, without school or expense of time or money, the Cherokee were able to read and write in their own language. An active correspondence began

to be carried on between the Eastern and Western divisions, and plans were made for a national press, with a national library and museum to be established at the capital, New Echota. The missionaries, who had at first opposed the new alphabet, on the ground of its Indian origin, now saw the advisability of using it to further their own work."

As early as 1823 the Cherokee National Council awarded Sequoyah "a silver medal with a commemorative inscription in both languages," and the treaty of 1828, made in Washington, stipulated for the payment to him of \$500, "for the great benefits he has conferred upon the Cherokee people, in the beneficial results which they are now experiencing from the use of the alphabet discovered by him."

Of the "alphabet" itself, worse even from a phonetic than from a mechanical point of view, Pilling observes (p. 183):

"This syllabary is one of the most curious compounds imaginable,—worse, perhaps, than would be expected to come from even such a source. Based, as I have said, upon the Roman characters found in the spelling-book, he took all sorts of liberties with them, subjected them to all kinds of indignities, turned them upside down, wrong side to, added tails when fancy dictated, and sometimes even horns. They are hard to make, cannot be joined together, as in our script, and altogether constitute as varied a hodge-podge as ever the untutor'd mind could desire. As characters they possess but one redeeming trait,—once memorized, it would scarcely be possible to forget them." In spite of all this, however, "a few hours of instruction are sufficient for a Cherokee to learn to read his own language intelligibly," and in two and one-half months the Cherokee child "acquires the art of reading and writing fluently in these rude characters."

The centennial of the invention of the "Cherokee alphabet" may well be celebrated by white men and red men alike.

VI. *Salishan*. As noted above, when discussing the Chinookan, the Duployan system of shorthand has been adopted by Father Le Jeune for translations (prayers, hymns, catechism, primer, etc.) in stenographic characters reproduced by the mimeograph in the Thompson, Shushwap and Okanagan languages of the Salishan stock. After trying, with no success, to teach the Indians to read in English characters, the thought came to him, in 1890, to try the shorthand system which he had learned as a youth. The account of its inception and progress, as given by Father Le Jeune, is as follows (Pilling, *Chinookan Bibliography*, p. 48):

"The first trial became a success. At the end of September, 1890, a poor Indian cripple, named Charley Alexis Mayoos, from the lower Nicola, saw the writing for the first time, and

got the intuition of the system at first sight. He set to decipher a few passages of Indian prayers in shorthand. In less than two months he learned every word of them, and he soon began to communicate his learning to his friends and relatives. Through his endeavors some eight or ten Indians at Coldwater, Nicola, B. C., became thoroughly acquainted with the writing system before April 1, 1891. In July, 1891, the first lessons were given to the Shushwap Indians; they lasted an hour every day for four or five days. Three or four of the best young men went on studying what they had learned, and were delighted to find themselves able to correspond in shorthand in the early fall. During the winter months they helped to propagate the system of writing among their people. In the meantime Mayoos had come to Kamloops and was pushing the work ahead among the young people there. In December, 1891, the system was introduced to the North Thompson Indians; in January, 1892, to those at Douglas Lake; in February, at Spuzzum and North Bend; and last of all, in March, to those at Deadman's Creek, near Sarvina. Soon after Indian letters came from William's Lake. In May, 1892, a few lessons were given at St. Mary's mission to the Lower Fraser and sea-coast Indians. Now the Indians teach each other and are very anxious to learn on all sides. The most advanced understand the value of the letters and the spelling of the words; but the greatest number begin by reading the words, then learn the syllables by comparing the words together, and at last come to the letters. They learn by analysis and much quicker than by synthesis."

A facsimile of a page of prayers in the language of the Thompson Indian is given by Pilling in his *Salishan Bibliography* (p. 40), and by Maclean, in his *Canadian Savage Folk* (p. 539).

VII. *Siouan*. According to Rev. John Maclean, the Canadian Stories of the Siouan stock, "read the Evans syllabic characters, and write them freely and neatly." Lord Southesk, in his *Saskatchewan and Rocky Mountains* (London, 1875) writes, —the real date is 1859-1860,—thus (p. 250):

"Our Stony messenger met us on the road, bringing me a letter from his people written in the Cree syllabic characters."

This letter from the Mountain Assiniboines (Stonies) is reproduced in this work.

In 1884-1885, a Winnebago (Siouan stock) Indian of Nebraska, on a visit to the Sac and Fox (Algonkian) acquired an "alphabet" in use among these people, which has been described by Miss Alice C. Fletcher in the modified form in which it became current among the Winnebagos. Writing in 1890, Miss Fletcher says:

"He taught others of his tribe, and the knowledge spread rapidly among the Winnebagos of Nebraska, and also to that part of the tribe living in Wisconsin, so that, at the present time, the principal correspondence of the tribe takes place by means of these characters."

In August, 1885, the Indian Agent wrote to Miss Fletcher :

"The tribe have suddenly taken to writing their own language, and people who have never learned English have acquired this art. The people claim they took the basis of it from the Sauk and elaborated it themselves. It is a very suggestive sight to see half a dozen fellows in a group, with their heads together, working out a letter in these new characters; it illustrates the surprising facility with which they acquire what they want to learn."

The Winnebago "alphabet" is really compounded of alphabet and syllabary on the basis of English letters. There are 15 initial sounds and four vowel modifiers, forming 128 combinations like syllables; and with these "one can easily write any word in the Winnebago language." There is a certain originality about it, for Miss Fletcher tells us :

"I have examined the Cherokee alphabet, thinking this one might be an outgrowth or corruption of that invented by Sequoyah, but it does not seem probable to me."

She remarks further :

"The education of Indian youths in English has set Indians to thinking of how they can preserve their language, and I have seen many boys and girls who have labored to make our English letters bend about the Indian words. It would seem as though we might in time expect several such inventions as this chart, but they will all probably have the same fate as our own childish devices to create a new language and a new alphabet,"

Conclusions. 1. The data recorded above describe efforts by white men or by Indians to enable American aborigines belonging to seven different linguistic stocks of North America to read and write by means of some kind of syllabary or phonetic "alphabet." The success achieved is often striking and the ease displayed in learning remarkable,—indeed a widespread facility in this direction is clearly indicated, particularly in the case of children and youth (the skill in acquisition by adults is also noteworthy). These facts are of considerable importance in connection with the problems involved in the acquisition of reading and writing by our own children.

2. The use of these "alphabets" varies from employment for the narrower purposes of the missionary, and his religious or ecclesiastical needs among some of the northern tribes to a national utilization such as is in vogue among the civilized

Cherokee and their heathen brethren of the Carolinian mountains. The total amount of literature of all sorts printed is quite large and is increasing in bulk.

3. The influence upon the Indian tribes of the acquisition of the ability to read and write their own language has been good and often led to the preservation of interesting material that would otherwise have perished altogether. The result of the invention of the "Cherokee alphabet" upon that Indian people is a reality that might well be compared with the fabled achievements of Cadmus in the ancient world.

4. The sources of these "alphabets" and the inspiration which gave them birth are diverse. Father Leclercq got his idea from observing the Indian children making marks on birch-bark as an *aide-mémoire* to their prayers; Evans's and Le Jeune's systems are evidently due to stenographic prototypes; Sequoyah was stimulated by an English spelling-book.

5. Altogether the history of the acquisition of written language by the primitive peoples under discussion forms an interesting chapter in racial pedagogy and psychology.

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